MONTANA VISIBILITY PROTECTION PLAN
December 5, 2005 Stakeholder Meeting #2 Notes

Department Staff:	Stakeholders in Person:	Stakeholders on Phone:
Bob Habeck	Amy Perius – Kennecott Energy	Bill Michaels – Glacier NP
Bob Jeffrey	Anne Hedges – MEIC	Brian Mitchell - NPS
Crya Cain	Bernie Gieser - ExxonMobil	Jim Parker – PPL
Deb Wolfe	Bud Clinch – MT Coal Council	Kristen Raleigh – Trinity Consult.
Don Vidrine	Don Allen - WETA	Steve Wright - CFAC
Jim Carlin	Hal Robbins – Bison Eng.	
John Coefield	Jeff Briggs – Smurfit-Stone	
	Joe Scheeler – Ash Grove	

WELCOME AND INTRODUCTIONS

To start the meeting, the Montana Department of Environmental Quality (Department) reviewed the basics of EPA's 1999 visibility rule and the state requirements under that rule. The Department mentioned where the visibility rule and associated documents can be found at this EPA website:

http://www.epa.gov/oar/visibility/actions.html#1999rule

The Department stressed the concept that Stakeholder meetings are open work sessions that allow participants to ask questions, propose revisions, and submit material. The Department also offered one-on-one attention to any stakeholder that desires additional information / assistance.

BEST AVAILABLE RETROFIT TECHNOLOGY (BART)

The Department presented its draft Montana BART process flowchart and proposed BART rule. These two documents are posted on the Department's website at: http://www.deq.mt.gov/AirQuality/AQinfo.asp

STAKEHOLDER QUESTIONS FOR BART PRESENTATION

Anne Hedges: What is the significance of the BART unit eligibility dates of "..not in operation prior to August 7, 1962, and was in existence on August 7, 1977?"

Department: That is not known. Congressional negotiations probably resulted in retroactive, albeit arbitrary dates that would apply to a sufficient number of sources that were not otherwise subject to new source or PSD requirements. The 1977 date corresponds to the first major amendments to the 1970 Clean Air Act, including the PSD major source preconstruction requirements.

Ann Hedges: Sources not subject to the BART Rule are contributing to visibility impairment. How are these sources regulated?

Department: The BART Rule is a specific statutory control measure implemented by states. However, the statute envisions other possible regulatory control measures besides the BART Process. The Montana Visibility Control Plan process will implement BART, as applicable. If additional emission reductions are necessary, following a modeling demonstration to determine reasonable further progress, the Department may require additional control measures for other sources of visibility impairment.

Anne Hedges: What do you do with multiple sources next to a mandatory federal Class 1 Area? Will the Department conduct a cumulative impact analysis?

Department: The American Corn Growers court decision only allows source-by-source impact analysis. The Department will first model potential BART-eligible sources individually and determine impact on Class I areas on a source-by-source basis. Future modeling may include additional sources if the reasonable further progress analysis indicates additional emissions reductions are necessary.

Jim Parker: Will the BART Process flowchart be included as part of the BART Rule?

Department: No. The BART Process flowchart is only a tool to describe the BART Rule and will not be published as part of the rulemaking process.

Jim Parker: Should the draft BART Rule include a definition for “Date of Construction” or “Construction” to add clarity? This definition would help with information request made by the Department.

Department: The definition for “Construction” is part of the definitions for “In-Existence” and “In Operation”.

Jim Parker: Will the Department allow sources more time to fulfill the information data request made by the Department on 11/22/05?

Department: The Department will contact you and address your question individually. The Department also clarified the data request for emissions information should be in terms of “pounds per calendar day”.

Anne Hedges: How is the Department estimating ‘natural background?’

Department: The Department is using EPA’s publication titled “Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule”, EPA-454/B-03-005, September 2003. This document has default natural conditions values for every mandatory federal Class I Area in the country. These estimated values are based upon Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring methodology for calculating visibility extinction.

The guidance directs improvement over the 20 percent “worst” visibility days and maintenance of the 20 percent “best” visibility days for each mandatory federal Class I Area by 2064. The statute directs reduction of anthropogenic emissions to return visibility to “natural conditions.”

Anne Hedges: Does the calculation of natural background reflect a certain time period?

Department: No. The calculation of natural background estimates, expressed in deciviews, measures the degree of visibility impairment that currently exists, given current vegetative landscapes, when human emissions contributions are removed. Researchers believe this approach is more practical than attempting to speculate about the visibility conditions that existed under the vegetative landscapes that existed three or four centuries ago, i.e. prior to the arrival of European settlers.

Anne Hedges: How is the Department calculating actual emissions?

Department: The Department requested information from each potential BART-eligible source regarding their actual 24-hour emissions from 2001, 2002, and 2003. This information will be used to determine the maximum 24-hour (i.e., calendar day) emission rates per pollutant for the CALPUFF (use all caps as later) model runs.

Anne Hedges: The majority of the Montana sources on WRAP's BART-eligible source list seem obvious. For reconstructed sources, BART applicability may not be so obvious. How is the Department going to determine BART for reconstructed sources?

Department: Reconstructed sources are included in the definition of "Existing stationary facility". The Department intends to review the information submitted by each source and make a determination regarding whether or not those sources are BART-eligible.

Hal Robbins: The proposed BART Rule has a definition for "BART Eligible Source" that differs from the EPA definition - why?

Department: The federal definition for "BART-Eligible Source" is identical to "Existing Stationary Source." These are circular definitions. The Department definition provides for a linear process that proceeds from the criteria for a subject source to a basis for fact-finding regarding the test for contributing to visibility impairment.

Hal Robbins: The proposed BART Rule includes a definition for "Building, Structure, or Facility", but where is it used in the rule?

Department: The term "Building, Structure, or Facility" is used within the definition of "Stationary Source."

Don Allen: On page 3 of the MT BART Process flowchart, the diamond-shaped box reads "Does modeling indicate a > or = 0.5 deciview increase about natural background at a mandatory federal Class I area?" Does that include surrounding states? Does that include a distance factor from the source to the mandatory federal Class I Area?

Department: States are required to protect visibility in all mandatory federal Class I Areas that may be affected by sources in their respective jurisdictions. No pre-established distances are included in this exercise. Source contributions to visibility impairment will be measured through computer modeling and

established protocols to determine whether, on a source-by-source basis, visibility impairment is > or = to 0.5 deciviews.

Don Allen / Bud Clinch: How are smoke emissions from wildfires accounted for in the calculation of natural background?

Department: Smoke emissions from wildfires are considered part of the natural background calculation. The natural background estimates are long term (5-year averages) that reduces extreme values and EPA expects to refine the estimates over time due to improved information and methods. However, the 20 percent best days are those that include insignificant emissions from wildfire smoke. The regulation of smoke emissions from wildfire will not be addressed through this BART Rule, but will be addressed through the Montana Smoke Management Program.

Don Allen: When was visibility monitoring performed to establish natural background?

Department: EPA initiated visibility protection through the 1977 CAAA and 1980 EPA rulemaking process. However, the technology to accurately measure visibility impairment came later. The 1991 report of the National Acid Precipitation Assessment Program (NAPAP) provided estimates for natural concentrations of six main particulate matter mass components and used assumptions for average extinction efficiencies and annual average humidity, based upon methodologies developed under the IMPROVE program.

Anne Hedges: Why didn't the Department include Volatile Organic Compounds (VOCs) to the list of visibility impairing pollutants?

Department: The Department determined that VOCs would not extend the applicability of the proposed BART Rule to any additional sources. Further, the current knowledge about VOC emission levels in Montana is limited.

Ann Hedges: Can the proposed BART Rule be applicable to non-mandatory federal Class I Areas?

Department: The federal visibility rule is only applicable to mandatory federal Class I Areas. Non-mandatory federal Class I Areas are located in proximity to mandatory areas. Therefore, the Department believes the protection provided under the upcoming visibility rule to mandatory areas will protect visibility in nearby, non-mandatory areas, as a secondary effect.

Additionally, tribal nations are considered sovereign territory under federal air quality rules. The tribes and EPA may cooperatively work together to develop visibility protection plans.

Mandatory federal Class I areas include National Parks (NP) (> 6,000 acres) and Wilderness Areas (WA) and National Memorials (> 5,000 acres) that were in existence on or before the passage of the 1977 CAA {42 USC §7472(a)}. In Montana, those areas are:

Glacier NP (1910)
Anaconda-Pintlar WA (1964)
Bob Marshall WA (1964)
Cabinet Mountains WA (1964)
Mission Mountain WA (1975)
U.L. Bend WA (1976)
Red Rock Lakes WA (1976)
Scapegoat WA (1972)
Selway-Bitterroot WA (1964)
Yellowstone NP (1872)
Gates of the Mountain WA (1964)
Medicine Lake WA (1976)

Non-mandatory federal Class I areas in Montana include:

Absaroka-Beartooth WA (1978)
Great Bear WA (1978)
Lee Metcalf WA (1983)
Rattlesnake WA (1980)
Welcome Creek WA (1978)

Hal Robbins: Who performs the modeling that determines which sources are subject to BART? The new rule does not specifically state what information a facility is supposed to submit. What should we submit? Wouldn't having a completeness determination be helpful?

Department: A facility is expected to submit information sufficient to conduct a modeling analysis for visibility effects of source emissions. Information that is not reasonably related to this modeling exercise is not necessary.

Anne Hedges: How do you properly account for actual emissions data when the source was in shutdown or otherwise operating at less than optimum capacity? Should the rule be explicit about this?

Department: The preamble to the guidelines at Appendix Y discourages the use of data that is not properly representative of a source operating at regular capacity. The maximum 24-hour emissions do not include malfunctions, startups or shutdowns.

Don Allen: If a source fails to submit actual emissions data, will the rule allow the Department to use potential emissions?

Department: The Department will use permitted potential emission limits in the absence of actual data.

Bernie Geiser: What do you do with sources that have emission units built prior to 1962?

Department: If a source is constructed before the 1962 date AND that same source is NOT reconstructed as set forth in the federal statue, then that source is NOT BART-eligible.

Ann Hedges: What happens following the five-year time period sources have to implement BART?

Department: BART must be implemented five years following EPA's approval of the Montana visibility plan submission. Sources failing to comply would face state and federal enforcement action. Title V permits must also reflect a source's BART determination.

Jim Parker: –Will BART determinations be part of a 2007 permit / SIP submission process?

Department: Visibility SIPs are due in December 2007. Therefore, the Department BART Rule must be completed prior to that date and incorporated into applicable Title V permits and the Montana Visibility plan.

Anne Hedges: Does the proposed BART Rule allow the public comment period on BART determinations to be extended beyond the 30-day period in special circumstances? HB 581 provides for that circumstance.

Department: The proposed BART Rule currently does not allow for more than a 30-day comment period. The Department will review HB 581 language regarding public comment period extensions.

VISIBILITY MODELING

The Department presented a map and table illustrating potential BART-eligible sources in Montana and their relationship to mandatory federal Class I areas. This information was compared to similar information about the Colorado BART process to demonstrate potential BART applicability by distance and total annual emissions.

STAKEHOLDER QUESTIONS for VISIBILITY MODELING

Jeff Briggs: Was CALPUFF modeling performed on the potential BART sources in Montana?

Department: No. The map and table were developed using permitted allowable annual emissions and estimates of distance between sources and mandatory federal Class I areas. We extrapolated Montana circumstances over the Colorado modeling table to demonstrate what we may expect in Montana.

Anne Hedges: Are sources subject to BART generally those that are the closest to the mandatory federal Class I Areas?

Department: Not really. Proximity is an important factor, but emission concentrations, meteorology, topography, and other factors should be evaluated. Nothing is certain until the Department completes the CALPUFF modeling.

Jim Parker: What about the Lewis and Clark electrical substation facility. Isn't it a potential BART source?

Department: No. That facility was built prior to 1962 and has not been reconstructed. Absent information indicating otherwise, the Department believes MDU's Lewis & Clark Station was built in 1958 and has not undergone reconstruction as defined in the BART rule.

Jim Parker: Are there options to use models other than CALPUFF?

Department: Yes. However, EPA strongly recommends the use of CALPUFF as the state-of-the-science model preferred by EPA and the Department. CALPUFF is widely available and other users may easily replicate results from that model. The Department will post all modeling files on the website for use by anyone wishing to evaluate model inputs and performance. The Department intends to use meteorological data from 2001, 2002, and 2003.

Joe Scheeler: Can site-specific weather data be used as a surrogate?

Department: Yes. However, the data must be quality assured and verified.

Joe Scheeler: What if a BART-eligible emission unit has a new, more stringent and enforceable emission limit and the actual emissions from this emission unit in 2001-2003 are no longer representative of current operations?

Department: The Department will accept actual emission rates for the CALPUFF modeling based on the new, federally enforceable emissions limits for the BART-eligible emissions units.

Joe Scheeler: The Regional Haze Rule assumes sources remain unchanged between years 2001 – 2003. What about the potential for a number of sources to have non-representative emissions data as a result of the installation of new, lower-emission equipment?

Department: The Department will perform quality assurance checks as part of the source information submission.

Hal Robbins: When will the Department notify sources whether or not they are subject to BART?

Department: Only sources subject to BART will be notified, and this notification will be made as soon as the BART Rule becomes final.

Don Allen: Will the Department post a timeline for the Visibility Plan process?

Department: The Department will post a proposed Visibility Plan timeline.

Meeting Length = 2 hours 15 minutes.

NEXT STEPS

Sources respond to Department's 11/22/05 letter by 12/22/05.
Revise draft BART Rule #3 and send out by January 6, 2006.
Stakeholder Meeting #3 will be January 17, 2006.
WRAP CALPUFF modeling protocol out by January 31, 2006.
Initiate BART rulemaking process by June 2, 2006.